

Upon reading my blog titled "What Network Neutrality is Really All About" a myspaceer responded with the following:

"Network neutrality is about keeping the huge media conglomerates like Fox, NBC/GE, ABC/Disney, etc. from setting up a many-tiered system which would put individual internet users on a slower system which we would have to pay extra to get off of and onto the fast track, which the giant media corporations would try to keep for themselves while charging more and more to the little guy to use. It's about keeping the internet from falling into total control of the mega-corporations. It's about maintaining the equality of access to the internet that now exists. If you want the internet to become the province of the rich, then keep fighting against net neutrality."

Another replied,

"I do not agree with a single thing you said in your blog, and rather than waste time "debating" about it, I'd rather just say "have a nice day". I do not agree with a single thing you said (and this issue is not open for discussion) because I view "free markets" as one of the worst threats to the world. Since the basis of your blog is built upon the idea that "a truly free internet can take care of itself", we really have nothing more to discuss. Have a nice day."

A many tiered system is not possible. Either the people who support Net Neutrality don't understand the infrastructure of the internet or they don't care about the truth.

For those who don't know, below is as brief and concise a breakdown I can give of the incredibly diverse, complex and ever evolving internet and the reasoning why it cannot fall into total control of the mega-corporations'.

## The Internet for Dummies

First we must differentiate between the web, the internet, its providers and protocols and the infrastructure used for all of the above.

## The Web

The World Wide Web is the data and the information we get on the internet. This includes pictures, video, audio, web pages, etc. Everything from the page we can read at the Library of Congress to the link to lasagna recipe that your aunt sends in an email. If there is a link to it somewhere, it is part of the world wide web. It is not physical. It is the data on the internet, and the data that takes you to the data. In short, the WWW is the content of the internet.

## The Internet

The physical connections from node to node are what constitute the internet. A network of computers at a college, a computer in a home, a laptop at Starbucks, a server used by a local internet provider, the servers used at the bank, the radio base stations your cell phone logs onto; these are what make up internet. Satellites and the cables that run on the bottom of the ocean are part of the internet.

## Protocols

The protocols used on the internet, or 'modes' are basically the computer languages and methods of operability and data transmit and exchange. These obviously require appropriate equipment to operate. Wireless frequencies, packet transferring, USBs; these all require language and protocols to be able to communicate with something else. Whenever you turn on your computer or connect it to something, it sends out a query to see if it can communicate with something through the connection. If it can't communicate, your computer tells you that you have a problem. In this case, what you are connected to is 'not recognized'. From connecting a memory strip to connecting to the internet, both ends must be able to communicate through an appropriate language and transfer protocol.

Protocols are often refined and upgraded. These upgrades which add features or fix bugs are usually made to enhance existing equipment. Makers of video processing cards or network adapters for example, often provide upgraded versions of the software needed for their products that can be downloaded from the internet.

Less often, but inevitably, public demands for greater speed, higher

definition, expanded capability, etc. call for improvements that require new equipment to operate. This may simply be a chip upgrade, a peripheral or whole system upgrade. While for some this can be costly, requiring it of everyone is foolish. Even though most consider Windows NT to be too problematic to maintain, still the upgraded versions of Windows will recognize it in connectivity and format.

And even less frequently, programmers and manufacturers determine that the present mode, language or a device's approach to processing is insufficient to support required growth. Such is the case with storage. Originally, IBM desktop computers used true floppy disks that were 10" and then 5.25" and then came the 3.5" hard sleeve disk. While these disks are still in use, they are of little use with modern programs because of their limited capacity. The nine-pin serial port was widely used for desktop and laptop peripherals, but the USB has almost completely replaced them. The benefits of this improvement were immediately recognized by manufacturers and programmers worldwide, and were literally adopted prior to the release of the innovation without any need of contracts.

Whether local or omnipresent, whether through the internet or from your motherboard to your monitor, computers require thousands of different protocols to operate. Without appropriate protocols, the world would not be connected. Without advances in protocols, the internet stops growing.

Much of the internet modes and protocols are a result of interoperability and interconnectivity agreements between corporate networks, between manufacturers and internet providers. Everyone agrees to a standard, often without written contracts. These peer contracts establish the operational modes we use, and consist of mutually beneficial approaches to modes and protocols.

“The phrase "settlement-free peering" is sometimes used to reflect this reality and unambiguously describe the pure cost-free peering situation.”  
(2)

Operating systems have needed to perform radical changes to service demands by the public for more productivity. Try connecting an IBM 8086 computer running on Windows 2.0 to the internet using a 300 bit Smartmodem. The protocols may still function and you may be able to connect through your

phone line, but with only 640 kilobytes of memory and only 4Mhz of power, a standard Myspace page would freeze your system after it tried for an hour to load it.

Try running a DOS program on a modern Windows XP or MAC operating system. It won't work! Net Neutrality calls to require protocols in all aspects of the net to still accommodate the slower and outdated technology to be "fair". How much will it cost and who will pay for it in the end? What does that require of a myspacer who wants everything on their page? It has to be able to be truncated so that it will load on the Fred Flintstone computer. How much will that cost and how much will it slow down the system for the rest of us? Only time will tell.

## The Infrastructure

When connecting the computer in our home or office to a candle maker's website in China, there follows a hierarchy of network hubs:

Point of Presence (POP)- wire service connected to your building (phonelines, cable etc.) This may be AOL, NetZero, Verizon, Pacific Bell, etc.

Network Access Point (NAPs)— these are huge high capacity connectivity ports owned by corporations, government, universities and private entities. This is the last strait line your internet connection may see. In the NAP are the routers that send information throughout the world and back to your computer.

Backbone- The best description is that a backbone consists of the high-capacity trunk lines that make up an interstate or international highway for information, and the NAP routers are the onramps. Once only colleges and government owned and maintained these, now corporations build them for their own and public use.

New technology allows us to bypass local POPs, NAPs and Backbones with service provided by direct satellite or cellular wireless connections.

Once on a backbone, our transmission goes back down another line of hubs until it reaches a site or network we are accessing whether that's Google or

jansvacationphotos.com.

As far as where they lie in the internet, websites we visit are no different than our computers. They may be in a large building with lots of servers and routers, just as the website I may start at freewebsites.com, but they are outside the hub and are visited by going through the hubs.

All of this has been built without restriction and cannot grow any other way.

“Meanwhile, over the course of the decade, the Internet successfully accommodated the majority of previously existing public computer networks. This growth is often attributed to the lack of central administration, which allows organic growth of the network, as well as the non-proprietary open nature of the Internet protocols, which encourages vendor interoperability and prevents any one company from exerting too much control over the network”. (1)

Where Does It Go From Here?

Now I’m going to warn you. If only a few entities gain control of the architecture of the internet, that is, the technology, protocols, POPs, NAPs, Backbones, and the content, then the world will be in trouble. Especially if they see this control as a way to nickel and dime us to death. The internet does not belong to anyone, it belongs to everyone. Individuals and corporations develop technology and protocols which they incorporate into the internet by agreements and by the demands of the market. Competition has invigorated these people to expand the internet at the exponential rate we have seen since its inception. Chunks of the infrastructure are owned by thousands of entities. Everyone Should Control the Internet.

The Market

Once “the premier entry point to the internet” with 30 million subscribers, AOL was the unstoppable IP. Due to their aggressive advertising techniques, at one point 40% of their subscribers didn’t even have computers but believe they should be able to get online. AOL discovered this and then deliberately advertised to these people even more. AOL is guilty of extensively using the very site trapping techniques the Net Neutrality proponents keep warning us about. But it was the competition of the

free-market that brought more ethical, affordable and diverse IPs that took their market share from 24.3% in 1997 to about 13% in 2006. (3,4)

An intelligent analyst that is interested in making money for his corporation is not going to recommend taking control of the internet. An intelligent analyst would come up with Myspace.com, google.com, ebay.com, Voice-over-internet-protocol, wireless-internet-access, etc. What the people want, that is what controls the internet.

## Corporations

Corporations invest billions of dollars into research and development to expand the internet and make the best use of it. Technology, the interactivity and user-friendliness of programs and web sites, the innovations of individuals are brought to world on a silver platter. Corporations are what build the internet.

## Government

Yes, I said "government". Government can promote the internet by enforcing existing monopoly laws. Cracking down on internet trapping crimes, phishing, spam, etc. Government is not what should run the internet, but it should protect it.

## Conclusion

The many-tiered-system some are inarticulately posing is not possible. Corporations cannot gain control of all of the physical aspects of the internet because some of them are government controlled and some are government subsidized and owned privately by entities that cannot sell them. Some, such as satellites are governed by special communications laws that preclude them from being used for profit. Much of the cable infrastructure is required by original contracts to be the property of local governments.

Corporations cannot gain control of internet protocols because it is too vast and requires too many agreements. Everyone on the internet is not going to wholly accept protocols that only benefit one corporation or one group. And even if they did, everything would change the next day.

I warned about letting control of the internet fall into the hands of a few.

With the present freedom, the net has shown that it can take care of itself with relatively few stumbles. But the more Net Neutrality is used to create the legislation it calls for, the more power government will have over technology, protocols, POPs, NAPs, Backbones, and web content. Even if they drive the internet into the ground, just as they have shown with things like education (the average American public school student is being beaten out by kids in Belarus), they'll never let go, ever.

Corporations cannot control the internet because the people will simply not buy into it. They cannot control the internet because other corporations will simply provide a better, cheaper and freer product competitively. They cannot control the internet because the federal government will break them up like they did Ma Bell.

Government control and taxation of the internet is not freedom. It is a socialist utopia that will do nothing but shackle mankind.

While I personally don't like seeing corporations having so much influence in our lives, I'm not willing to give up my freedom to those in government in order to stop them. Even if that did occur, there are proven ways of dealing with it.

I could just as easily say that the affiliates to the progressive movement that are pushing for Net Neutrality (yes, there are a few Republicans) have not changed their stripes and are still only interested in placing absolute power over our entire lives into the hands of a few in the name of "the people", and are determined to deny everyone a chance to prosper.

The internet is not one thing. The only way to stop it is to regulate and tax it. At first the infrastructure ran strictly through phone lines and through college server equipment. Now it runs through fiber optics, cable, satellite and the cellular industry. Soon AccessBPL (Broadband-over-power-lines) will bring the internet into every home, in every community, right through a house's electrical system and out of every outlet. This will occur because of legislation signed by congress that eases restrictions on corporations.

Fewer restrictions on those who build the internet are what the government can do to help. Restrictions on monopolistic power in the U.S. have been in

place since 1890. Government enforcement of the laws against fraud will keep the corporations on the internet honest. Net Neutrality is about something completely different.

<http://en.wikipedia.org/wiki/Internet>

[http://en.wikipedia.org/wiki/Peering\\_agreement](http://en.wikipedia.org/wiki/Peering_agreement)

<http://www.clickz.com/showPage.html?page=164401>

<http://www.watleyreview.com/2004/111604-3.html>

## NETWORK NEUTRALITY

Network neutrality is a regulation principle for broadband.Â It is the face being put on a much broader idea.

The public is being told that Net Neutrality is about keeping the internet free from service switching scams.Â These scams might restrict users to certain providers or force them to use other providers, whether IPs or others.Â

First, to address what everyone is constantly being told about Network Neutrality; it actually calls for broadband networks to have no equipment or mode restrictions.Â That is a good thing because when new technology comes out that allows me to have 3D holographic interface games with 10,000 people around the world, I'm there.Â However, there are no restrictions on this now.Â Let me repeat that: THERE ARE NO RESTRICTIONS NOW!

So if Network Neutrality proposes to do something that is already being done, what else is it for?

Well, the fact that there are no restrictions now can be seen in the rapidity with which we and the internet are growing together.Â So Network Neutrality is like saying, we should pass laws that allow us to drive down the street, across town or across the nation.Â We can already do this.Â When I say that Network Neutrality is the face of a much broader idea, I mean it is being used to scare people with stories of provider switching and service manipulation.Â In other words, to induce fear that we will be taken advantage of.Â Wh